

What is claimed is:

1. An image sensor, comprising:

a storage means for storing a plurality of pixel data

5 which is transmitted from a pixel array block;

a switching means for delivering a first pixel data from the storage means in response to a first control signal PASS;

a defect pixel repairing means which is controlled by the first, a second, a third, a forth and a fifth control  
10 signals in order to receive surrounding pixel data having the first pixel data from the storage means and the first pixel data from the switching means and output a revised pixel data by using the first pixel data or the surrounding pixel data;  
and

15 a image signal handling means for receiving the first pixel data outputted from the switching means or one of the first pixel data and the revised pixel data outputted from the defect pixel repairing means and operating an image process in order to improvement of the image sensor.

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2. The image sensor as recited in claim 1, wherein the defect pixel repairing means includes

a temporary storage means for temporary storing the second control signal;

25 a column address detecting means for comparing the second control signal outputted from the temporary storage means with the forth control signal and generating a sixth

control signal showing whether the second control signal is equal to the forth control signal or not;

a update controlling means for outputting an next second control signal to the temporary storage means in response to  
5 the sixth, the third and the fifth control signals;

a defect pixel changing means for receiving the surrounding pixel data and generating the revised pixel data;

a revised pixel selecting means for selectively outputting the revised pixel data or the first pixel data in  
10 response to the sixth control signal; and

a switch outputting means controlled by the first control signal in order to selectively output an output of the revised pixel selecting means.

15 3. The image sensor as recited in claim 2, wherein the defect pixel changing means generates the revised pixel data by using an average of the surrounding pixel data.

20 4. The image sensor as recited in claim 2, wherein the defect pixel changing means generates the revised pixel data by using one out of the surrounding pixel data except the first pixel data.

25 5. The image sensor as recited in claim 2, wherein the update controlling means includes

a first D flip-flop for receiving the third control signal and outputting a current third control signal;

a second D flip-flop for receiving the current third control signal and outputting a next third control signal;

a first AND gate for receiving the current third control signal and the next third control signal;

5 an OR gate for receiving the current third control signal and an output of the first AND gate;

a second AND gate for receiving the sixth control signal and an output of the OR gate; and

10 a XOR gate for receiving the fifth control signal and an output of the second AND gate and outputting a seventh control signal for updating the second control signal.

6. The image sensor as recited in claim 2, wherein the revised pixel selecting means includes two transmission gates  
15 controlled by the sixth control signal or the inverse sixth control signal in order to selectively deliver the first pixel data or the revised pixel data.

7. The image sensor as recited in claim 1, wherein the  
20 switching means includes

a first switching means controlled by the first control signal and the inverse first control signal in order to transmit the first pixel data to the image signal handling means; and

25 a second switching means controlled by the first control signal and the inverse first control signal in order to transmit the first pixel data to the defect pixel repairing

means .